

Title (en)

Poppet valve and method of making it

Title (de)

Hubventil und Herstellungsverfahren

Title (fr)

Soupape champignon et procédé de fabrication

Publication

EP 0859131 A1 19980819 (EN)

Application

EP 97300976 A 19970214

Priority

EP 97300976 A 19970214

Abstract (en)

A poppet valve (3) comprises a valve stem (1) and a valve head (2) which is made of light metal such as A1 alloy. On a valve face (2a) of the valve head, a hard alloy layer (4) which comprises wear resistance increasing material and the light metal of the valve head is formed to increase wear resistance. <IMAGE>

IPC 1-7

F01L 3/02; **F01L 3/04**

IPC 8 full level

F01L 3/02 (2006.01); **F01L 3/04** (2006.01)

CPC (source: EP)

F01L 3/02 (2013.01); **F01L 3/04** (2013.01)

Citation (search report)

- [YA] EP 0543353 A1 19930526 - SUMITOMO LIGHT METAL IND [JP]
- [A] EP 0228282 A2 19870708 - TOYOTA MOTOR CO LTD [JP]
- [A] CH 465323 A 19681115 - BLUECHER WAHLSTATT LEICHTMET [DE]
- [Y] PATENT ABSTRACTS OF JAPAN vol. 018, no. 563 (M - 1693) 27 October 1994 (1994-10-27)
- [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 338 (M - 1628) 27 June 1994 (1994-06-27)
- [A] PATENT ABSTRACTS OF JAPAN vol. 016, no. 331 (M - 1282) 20 July 1992 (1992-07-20)
- [A] PATENT ABSTRACTS OF JAPAN vol. 012, no. 045 (M - 667) 10 February 1988 (1988-02-10)

Cited by

DE102007051374A1; EP2933445A1; DE102007029675A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0859131 A1 19980819

DOCDB simple family (application)

EP 97300976 A 19970214